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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,620	12/06/2001	Jeffrey David Shelley	KCC-15,814	6625

35844 7590 10/15/2003

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EXAMINER	
COLE, ELIZABETH M	

ART UNIT	PAPER NUMBER
1771	

DATE MAILED: 10/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/010,620	SHELLEY ET AL.	
	Examiner	Art Unit	
	Elizabeth M Cole	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

P riod for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 August 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-11,13-27 and 29-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-11,13-27,29-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 2-11, 13-27, 29-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold et al, U.S. Patent NO. 5,707,468 in view of Kane et al, U.S. Patent No. 4,359,445. Arnold et al discloses a method of making a nonwoven fabric comprising depositing a nonwoven layer on a belt, subjecting it to a hot air knife in order to impart sufficient structural integrity to the layer to allow it to be processed. And depositing additional nonwoven layers on to the first nonwoven fabric. The layers of the nonwoven fabric may also be subjected to more substantial bonding such as hydroentanglement, needling, ultrasonic bonding, through air bonding, adhesive bonding and thermal point bonding or calendaring. See col. 4, lines 58-65. Arnold et al differs from the claimed invention because Arnold does not teach that some of the layers should comprise crimped homopolymeric continuous fibers. Kane et al teaches that particularly lofty nonwoven fabrics may be formed by extruding crimpable homopolymeric continuous fibers and then heat treating the fibers to crimp them. See col. 1, lines 35-59; col 2, lines 4-14. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the fabric of Arnold et al so that it comprised layers that comprised the crimped homopolymeric fibers of Kane et al. One of ordinary skill in the art would have been motivated to employ the fibers of Kane et al because Kane et al teaches that these fibers produce a particularly lofty web and Arnold et al is particularly concerned with forming a lofty, non-compressed web. With regard to the processing temperatures and line speeds, Arnold teaches

that the hot air knife operates at a temperature of 220-550 F while Kane teaches col. 6, lines 43-50, that the velocity of the air during the crimping process may be at 200 feet per minute. With regard to the limitation that the crimped fibers are helical, either the fibers of Kane would inherently be helical due to their crimping, or else it would have been obvious to have selected the particular asymmetric shape of the extruded fibers so that it would produce the desired degree of crimping and shape of the crimped fiber since Kane recognizes that the crimping of the fibers is due to the fibers having an asymmetric cross section. See col. 2, lines 23-27 and col. 6, lines 51-65.

Applicant's arguments filed 8/1/03 have been fully considered but they are not persuasive. Applicant argues that the present invention clearly claims producing already crimped fibers on the wire and setting the crimp with a specific heat operation applied ot the already formed crimps. However, the claims do not include these limitations. The claims recite "creating a lofty second layer having crimped homofilament fibers". The claims do not require that the fibers be already crimped, but instead recites only "creating a lofty second layer having crimped homofilament fibers". Depositing fibers and then activating the latent crimp meets this limitation. Similarly, Applicant argues that in Kane the crimps are formed by heating the uncrimped fibers to form crimps while the present invention calls for a previously crimped fiber. However, as set forth above, the claims do not recite that the fibers are previously crimped.

Applicant argues that the word "continuous" is not in the present claims. However, the claims also do not preclude the use of continuous fibers.

With regard to Arnold, Applicant argues that Arnold teaches melt bonding the fibers by using the hot air knife. However, Arnold clearly teaches at col. 5, lines 25-29 that the treatment by the hot air knife is "insufficient to melt the fibers".

With regard to the argument that Kane does not teach employing a nonwoven layer as the substrate layer to carry the crimpable fibers, Arnold teaches employing a foraminous belt to hold the deposited fibers layers. See col. 4, liens 47-49.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant argues that there is not support for the statement that it would have been obvious to have optimized the shape of the crimps in Kane and requests a Declaration in support of this statement. However, at col. 2, lines 23-27 Kane teaches that the asymmetry of the orifices results in the crimped shape of the fibers, therefore, it is the examiner's position that Kane teaches that the crimped shape of the fibers is directly related to the asymmetry of the orifices, and therefore, it would have been obvious to have selected the shape of the orifices through the process of routine experimentation in order to produce a fiber having the desired crimp.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (703) 308-0037. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (703) 308-2414.

Inquiries of a general nature may be directed to the Group Receptionist whose telephone number is (703) 308-0661.

The fax number for all official faxes is (703) 872-9306. The fax number for unofficial faxes is (703) 305-5436.

Elizabeth M. Cole
Primary Examiner
Art Unit 1771

e.m.c